

Vitamin A Palmitate 1.7
(Stabilized with BHA/BHT/ Tocopherol)

Description

Vitamin A Palmitate 1.7 m.I.U./g is a brownish yellow to golden yellow , oily liquid, which may crystallize on storage. It consists of pure Vitamin A Palmitate.

Potency

Appearance: brownish yellow to golden yellow oil

Peroxide Value max. 10

Acid Value: max. 2.0

Identity For:

- Vitamin A Palmitate corresponds

Vitamin A content min. 1.7 m.I.U./g

Stability & Storage

Vitamin A Palmitate 1.7.m.I.U./g is sensitive to air, Heat and light. In the unopened original container (which is sealed under nitrogen) and in a cool place, it can be stored for about 18 months. After opening of the container, the contents should be used within a short period.

Applications

For pharmaceutical and food preparations.

Safety Information

This product is safe for the intended use. Avoid ingestion or direct contact by applying protective measures and personal hygiene.

Packing: 5 kg

Country of Origin: CHINA

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Method of Analysis:

Content of Vitamin A: (Spectrophotometric method)

A. Reagents

- a) Ammonia 2%: Prepare from AR grade Ammonia 25 %
- b) Ether: Diethyl ether, peroxide free, freshly distilled.
- c) Isopropanol: Spectroscopic grade.

B. Procedure (Double determination)

Transfer about 150 -175 mg, accurately weighed, to a 200 ml vol flask; add 2ml of 2% ammonia soln and wet the beadlets. Keep in a water-bath at 65°C for 5 mins, swirling occasionally in order to disintegrate the beadlets. Add 40 ml of isopropanol (in 2.5 ml portions twice, & then the remaining quantity, SWIRLING THE FLASK AFTER EACH ADDITION). Then add ether & dilute the vol with ether, stopper, shake well for 2 mins and allow to stand in the dark for 10 mins. (Stock soln) Centrifuge 50ml of the stock soln. Pipette 5.0ml of the centrifuged soln into a 200 ml vol flask, carefully evaporate off ether under a stream of nitrogen gas/water vacuum (DO NOT EVAPORATE OFF THE SOLN COMPLETELY), and dilute to volume with isopropanol and mix. (Sample soln). Measure the absorbance of the sample soln in 1-cm quartz cell with a spectrophotometer against isopropanol as blank at 314,324 to 329 and 338 nm. The maximum absorbance occurs at 327 +/- 1 nm.

C. Calculation

Calculate the corrected absorbance at about 327 nm as follows:

$$A(\text{corr}) = 3.61 (2 \times A_{327} - A_{314} - A_{338})$$

$$\text{Vitamin A content, (IU/g)} = \frac{A(\text{corr}) \times B \times 1900 \times 1000}{W}$$

W = weight of sample in mg

B = dilution factor, i.e. 80

1900 = conversion factor (absorbance to IU)

VA potency is also now reported by multiplying the uncorrected potency by 0.93

Note: Conduct all operations in the absence of actinic light. Measure the absorbance within one hour after preparation of the stock soln.